

## REPORT



### **A - Material**

1. The Trans-Continental Truck Train was composed of various types of light and heavy motor trucks, touring cars, special makes of observation cars, motorcycles, ambulances, trailers, tractor and machine shop unit. No attempt is made here to enumerate each one, nor to give specifications in detail, as this information is already in hands of Chief, Motor Transport Corps.

The vehicles were equipped with pneumatics, giant solids, dual solids and single solid tires. The Mack trucks represented the chain drive type, the F. W. D.'s and Militor represented the four wheel drive type, and various standard makes represented the two wheel, rear drive type.

Practically each of the above named types has its own most efficient speed rate, causing great difficulty in keeping the trucks properly closed in convoy formation.

2. Mechanical difficulties during the first part of the trip were slight, and easily overcome.

Reports of officers with the convoy indicated that the vehicles had not been properly tested and adjusted before starting the trip. This occasioned many short halts on the part of individual trucks, to adjust carburettors, clean spark plugs, adjust brake bands, to time motors and make minor repairs of this nature. It was evident though that many of these difficulties were caused by inefficient handling of the vehicle by the driver.

As the trip went on, it soon developed that difficulties arose much more frequently in some types than in others. The Garford trucks were particular offenders. While other makes and types had difficulties at times, so many repairs were necessary on the three Garford trucks as to justify the opinion that it is not so well constructed as other standard makes on this trip. One Garford was compelled to abandon trip entirely.

In heavy going, such as sand and stiff grades, the heavy types were always in difficulty. Chain drive trucks would simply not operate in sand, and practically all of the heavy trucks had to be pulled through sand stretches. In such places, the lighter types, (1½ ton) usually went through without help. This was especially true of those mounted on pneumatic tires (ambulances). The heavy types also labored excessively of stiff grades. On a grade in California a Mack blew out a cylinder head. Travel on these grades necessitated constant work on the clutch assemblies of the heavy types. The heavies in these places slowed up the lighter and swifter light trucks; which type made all the grades easily. In this connection, I believe that the Riker (3 ton), and F.W.D., had less difficulty in negotiating stiff grades, and sand stretches, than any other type of heavy truck.

On the very best roads, such as in Maryland, Pennsylvania and California, the heavies were not capable of the speed that the lighter types